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PRESTRESSED TENDONS SYSTEM IN A BOX GIRDER BRIDGE

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ABSTRACT

This research study analyzes the several positions in a box girder bridge where the pre-stressed tendons can be added. By keeping a constant loading and varying the positions the of the tendons, a comparative study has been done so as to understand the most effective positions of these pre-stressed tendons. For the analysis, SAP 2000 software has been used and the study has been done on the basic AASHTO type section of the box girder bridge. Two equal spans of the bridge with a two lane deck have been studied and the loading has been considered of moving type vehicles. The stress contours and deflections of the bridge deck have been observed so as to compare the results.

KEYWORDS: Bridge, Box Girder Bridge, Prestressed Tendons, Prestressed Tendons System, Tendons